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ABSTRACT

This research investigated the influence of parental involvement on the academic achievement of 1,714 Mexican-American 8th-grade students, a subsample of the National Education Longitudinal Survey (NELS 88). A structural equation model was used to investigate the direct, indirect, and total effects of parental involvement, previous academic achievement, and home rules on standardized achievement tests. Both the student and the parent surveys were used in the study. Results indicate the following: (1) parental involvement does influence positively the academic achievement of 8th-grade Mexican-American students; (2) parents who have a high socioeconomic status and whose children have previously obtained high grades tend to be more involved in their childrens' education and have higher educational aspirations for their children; (3) parents are more involved with female children than with male children; (4) parents' language proficiency does not influence academic achievement but does influence parental involvement; (5) the strongest influence on academic achievement was previous achievement (grades); (6) family rules did not affect students' academic achievement; (7) Mexican-American males had higher overall academic achievement when compared to Mexican-American females; and (8) children whose parents were born outside of the United States had slightly higher math achievement than children whose parents were born in the United States. Suggestions for future research are included. (LP)

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TESTING THE INFLUENCES OF PARENTAL INVOLVEMENT ON MEXICAN-AMERICAN EIGHTH GRADE STUDENTS' ACADEMIC ACHIEVEMENT: A STRUCTURAL EQUATIONS ANALYSIS

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ABSTRACT

Mexican-American (MA) children are educationally disadvantaged, are at-risk for academic failure, and have not achieved at the level of other immigrant groups. If a good education is necessary for all students, then educators and policy makers must understand and search for alterable variables which can influence the academic achievement of MA children. This presentation discusses the results of an investigation that answers the question: Does parental involvement affect the academic achievement of eighth grade Mexican-American students? This research used the National Educational Longitudinal Survey (NELS 88) and LISREL.

The influences that parental involvement, parent English language proficiency, family background, gender, previous academic achievement, and home rules have on the academic achievement of MA students are discussed.

The results have educational and scientific implications for those who are interested in forging effective partnerships between schools and parents in an effort to improve the academic achievement of MA children.

Mexican-Americans are the fastest growing ethnic group in the United States, and in some large urban school districts, along with blacks, they are the majority (Pallas, Natriello, & McDill, 1989). But the educational achievement of Mexican-American (MA) children continues to be of concern to educators, school administrators, policy makers, and parents. Mexican-American children are said to be educationally disadvantaged (cf. Ortiz, 1986), are at-risk for academic failure (Hafner, Ingels, Schneider, Stevenson, & Owings, 1990) and have not demonstrated the academic achievement that other immigrant groups have, even after they have lived in the U.S. for many generations. If a good education is necessary for all who live in a modern society, then it becomes imperative that we search for alterable variables which can influence the academic achievement of MA children.

It is commonly accepted that parental involvement influences children's academic achievement, for if parents are actively involved in their children's education then academic achievement will increase (Epstein, 1984). According to Barbara Bush (1990), "One of the simplest concepts of education is also one of the most important: Education begins at home, and

parents are the first teachers" (p 48). It is believed that "What parents do to help their children learn is more important to academic success than how well-off the family is" (U.S. Department of Education, 1987, p. 5). Yet, research does not always support these beliefs.

Previous research related to parental involvement and MA academic achievement suggest that parent-child relationships are indeed important (Gandara, 1982); influence early academic achievement (Reynolds, 1989); and are determined by family parenting styles (Escavar & Lazarus, 1982). English language proficiency may become a barrier to parental involvement (Lynch, 1987), and through bilingual parent educational training programs parental involvement can be facilitated (Berry-Cabon, 1983).

The purpose of this research was to investigate the influence of parental involvement on the academic achievement of 1,714 eighth grade MA children, when important background variables (previous academic achievement, parent language proficiency, family background, and gender) were controlled.

METHOD

Structural equations analysis was used to investigate the causal relations among variables in

a recursive model. More specifically, LISREL was used to determine the direct, indirect and total effects of parental involvement, previous academic achievement, and home rules on the academic achievement, as measured by reading, mathematics, social studies and science standardized achievement tests. The theoretical model used was based on previous research (Bloom, 1984; Epstein, 1987; Keith, 1991; Majoribanks, 1984; Reynolds & Walberg, 1990).

DATA SOURCE

This research used a MA subsample (1,714 students) of a representative sample of U.S. eighth grade students, who completed the NELS 88 survey and related academic achievement test. Parents who complete the parent questionnaire (1,714 parents) were also included in the analysis. NELS 88 is the third major longitudinal survey developed by the National Center for Educational Statistics (NCES).

RESULTS AND CONCLUSIONS

Educators and policy makers are exposed to many educational bandwagons and parental involvement is currently touted as a method to improve the academic achievement of students. There is a paucity of basic and applied research concerning the role that parental involvement has on MA students' academic achievement.

Through the use of a large subsample of a nationally representative sample, results of this research start to fill this void. Thus, these results are very important for practitioners, researchers and policy makers in field of education.

The most salient finding of this research is that parental involvement does appear to influence positively the academic achievement of eighth grade Mexican-American students. Mexican-American parents who spend time discussing school activities with their children and who have high educational aspirations for their children may influence their children's academic achievement. This type of parental involvement appears to affect overall academic achievement, as well as reading, math, science, and social studies achievement. Therefore, parental involvement is one factor which should be considered in an effort to increase the academic achievement of Mexican-American children.

Parental involvement is, in turn, strongly influenced by parents' SES and by students' previous achievement. Parents who have high SES and whose children obtain high grades tend to be more involved; they discuss school activities and have high educational aspirations for their children. Parents are also more involved with female children than with

male children.

Lynch and Stein (1987) believe that parents' language proficiency will influence parental involvement and academic achievement. In contrast, this research suggests that parents' language proficiency does not influence academic achievement to any meaningful extent, but does influence parental involvement. However, these results suggest that as parents become more proficient in English their parental involvement decreases rather than increases. These effects are small, however, and require further study.

By far the strongest influence of academic achievement for Mexican-American students was previous achievement (grades), a common indicator for previous learning and achievement, learning aptitude, and cognitive ability. These results are consistent with other research, which suggests that previous learning affects future learning (Duncan, Fetherman, & Duncan, 1972).

As with other research, the family background (SES) of the family is another influence on academic achievement. Contrary to recent claims by the U. S. Department of Education (1987), the SES of a family does appear to influence a child's academic

achievement, and is not canceled out by parental involvement. But the influence of SES on academic achievement may be reduced by increasing parental involvement.

Although it is commonly believed that family rules about studying, GPA, TV, and chores will increase student's academic achievement (cf. Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987), this research offers little support for that notion. The family rules variable did not influence most measures of academic achievement and rules may even have a small negative influence on social studies.

Much has been written concerning the effects of gender on academic achievement (e.g. Ethington, 1991; Wolfle & Ethington, 1986). This research found Mexican-American males had higher overall academic, math, science, and social studies achievement, whereas females had higher reading achievement.

Parents' birth place only influenced math achievement; children whose parents were born outside of the U. S. had slightly higher math achievement than children whose parents were born in the U.S. A closely related variable, parents' language proficiency, did not influence any area of academic achievement.

IMPLICATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

The research findings presented here suggest that parental involvement is indeed an important influence on Mexican-American students' overall academic achievement and on achievement in specific academic areas. It is important for parents and educators to acknowledge the value of parents discussing day to day activities with their children and of having high educational aspirations for their children. It appears that parents indeed can make a difference in a child's academic achievement. Educators and policy makers need to continue to support parents in discussing school activities and encourage parents to have high educational aspirations for their children.

Parents need to understand the educational processes of the school that their child attends, and stay abreast of classroom activities. By communicating with teachers and their children, parents can gain knowledge about "daily activities" and about how their children are doing. Teachers and administrators need formally and informally to keep parents up-to-date about children's progress in order to encourage greater academic skill development and assist in guiding Mexican-American students into appropriate choices of academic coursework (higher level math and science

courses). Although Mexican-American parents may have high educational aspirations for their children, without appropriate college preparation course work it is unlikely that those aspirations will be realized.

Another result that has educational implications is that as parents become more proficient in English, controlling for SES and previous grades, academic achievement does not increase. In fact, this research suggest that as parents become more proficient in English their parental involvement slightly decreases. Therefore, programs designed to assist Mexican-American parents to increase their English speaking skills should not be viewed as a means of increasing parental involvement or increasing academic achievement for Mexican-American children.

Limitations of this research should be noted. First, this research used a structural equations model to investigate the influence of parental involvement on academic achievement. The effects of parental involvement were estimated by studying existing variations. The research presented did not study parental involvement by manipulating or varying parental involvement treatments between a control group and an experimental group, rather it reports results from analyses where no manipulation was done. When

using this method it is necessary to note that there may be some variables outside of the model that influence both parental involvement and academic achievement, leading to problems or threats to internal validity which threaten the causal conclusions. Therefore, models should always be based on strong theoretical bases and previous research.

This research, using a structural equations model, has answered a number of research questions but has also generated questions for future research. Other analyses using the full LISREL model would allow a test of the model to the data and would control for one of the limitations of this research - the unreliability of the variables in the model.

A multi-sample LISREL analysis would also be worthwhile. Other ethnic groups (e.g., white, black, other Spanish speaking groups or other minorities) could be analyzed using the model developed for this research. It could be determined if parental involvement has the same influence on academic achievement for other ethnic groups as the results reported here.

Results of this research suggest that parental involvement is influenced by the gender of the child. Further research using the LISREL multi-sample

technique could help determine if the results reported here are equally valid for males and females.

This research raises as many questions as it answers. The influence that parents' birth place has on academic achievement could be refocused and analyzed by determining what generation (in U.S.) these students are and what role that has on parental involvement and academic achievement. The role that parents' educational aspirations has on academic achievement would be another fruitful research area. The lack of influence family rules has on academic achievement is troublesome and warrants further investigation.

REFERENCES

Berry-Cabon, C. S. (1983). Parent-community involvement: The effects of training in a public school bilingual education program. Small Group Behavior, 14(3), 359-368.

Bloom, B. S. (1984). The search for methods of group instruction as effective as one-to-one. Educational Leadership, 4(8), 4-17.

Bush, B. (1991 February). Bring parents back to the fold. The School Administrator, 48.

Dornbusch, S., Ritter, P., Leiderman, P. H., Roberts, D. F., & Fraleigh, M., (1987). The relation of parenting style to adolescent school performance. Child Development.

Duncan, O. D., Featherman, D. L. & Duncan, B. (1972). Socioeconomic background and achievement, New York: Seminar Press.

Epstein, J. L. (1984, Winter). School policy and parent involvement: Research results. Educational Horizons, 62, 70-72.

Epstein, J. L. (1987). Toward a theory-School Connections: Teacher practices and parent involvement. In Hurrelmann, K, Kaufmann, F. & Losel, F (Eds.), Social Intervention: Potential and Constraints, New York: Walter de Gruyter.

Escovar, P. L. & Lazarus, P. J. (1982). Cross-cultural child-rearing practices: Implications for school psychologist. School Psychology International, 3(3), 143-148.

Ethington. C. A. (1991). A test of a model of achievement behaviors. American Educational Research Journal, 28, 155-172.

Gandara, P. (1982). Passing through the eye of the needle: High-achieving Chicanas. Hispanic Journal of Behavioral Science, 4(2), 167-179.

Hafner, A., Ingels, S., Schneider, B., Stevenson, D., & Owings, J. A. (1990). National Education Longitudinal Study of 1988: A profile of the American eighth grader: NELS:88 student descriptive summary. U. S. Department of Education, Office of Educational Research and Improvement, NCES 90-458. Washington DC: U. S. Government Printing Office.

Keith, T. Z. (1991). Parental involvement and achievement in high schools. In S. Silvern (Ed.), Advances in reading/language research: Literacy though family, community and school interaction, 5, 121-145. Greenwich, CT: JAI Press.

Lynch, E. W. & Stein, R. C. (1987). Parent participation by ethnicity: A comparison of Hispanic, Black and Anglo families. Exceptional Children, 54(2). 105-111.

Majoribanks, K. (1984). The evaluation of a family learning environment model. Studies in Educational Evaluation, 9, 343-351.

Ortiz, V. (1986). Generational status, family background, and educational attainment among Hispanic youth and non-hispanic white youth. In M. Olivas (Ed.), Hispanic College Students, New York: Teachers College Press.

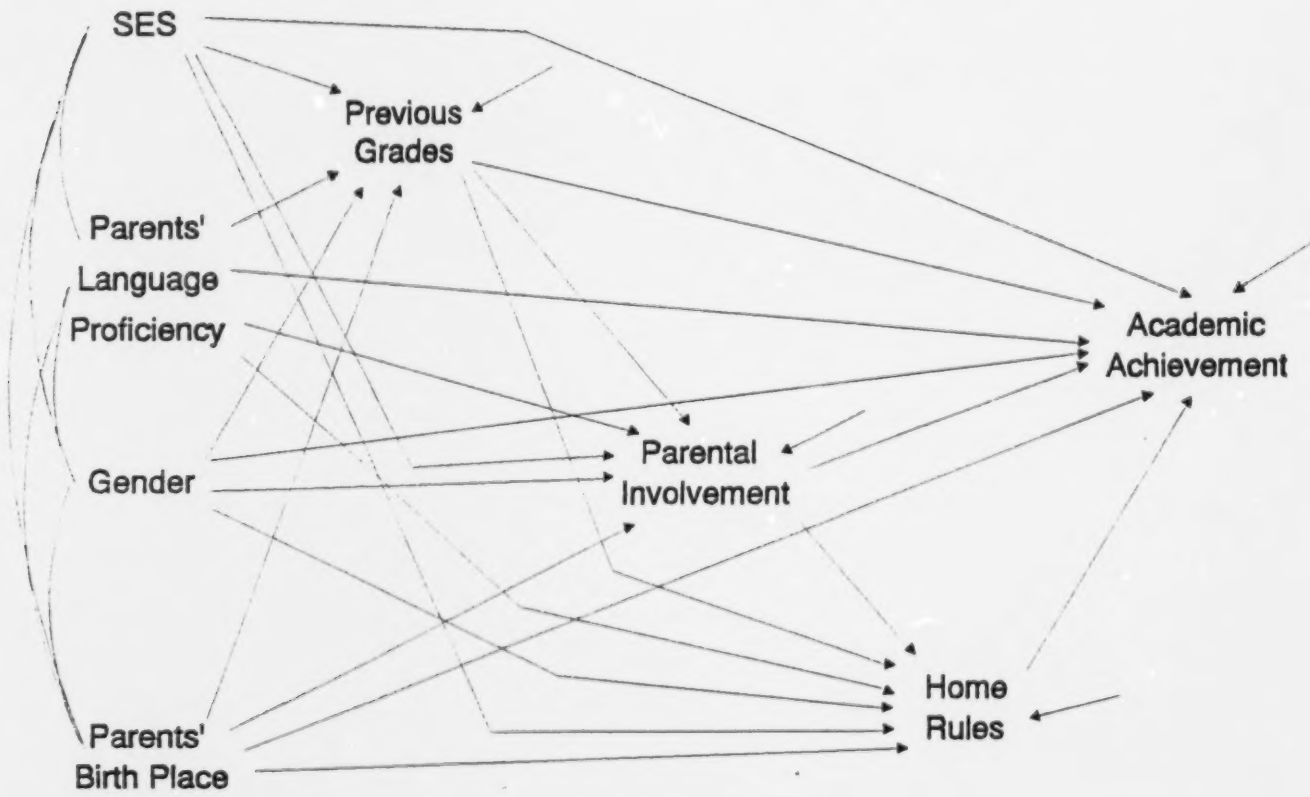
Pallas, A. M., Natriello. G., & McDill, E. L. (1989). The changing nature of the disadvantaged population: Current dimensions and future trends. Educational Research, 18(5).

Reynolds, A. J. (1989). A structural model of first-grade outcomes for an urban, low socioeconomic status, minority population. Journal of Educational Psychology, 81(4), 594-604.

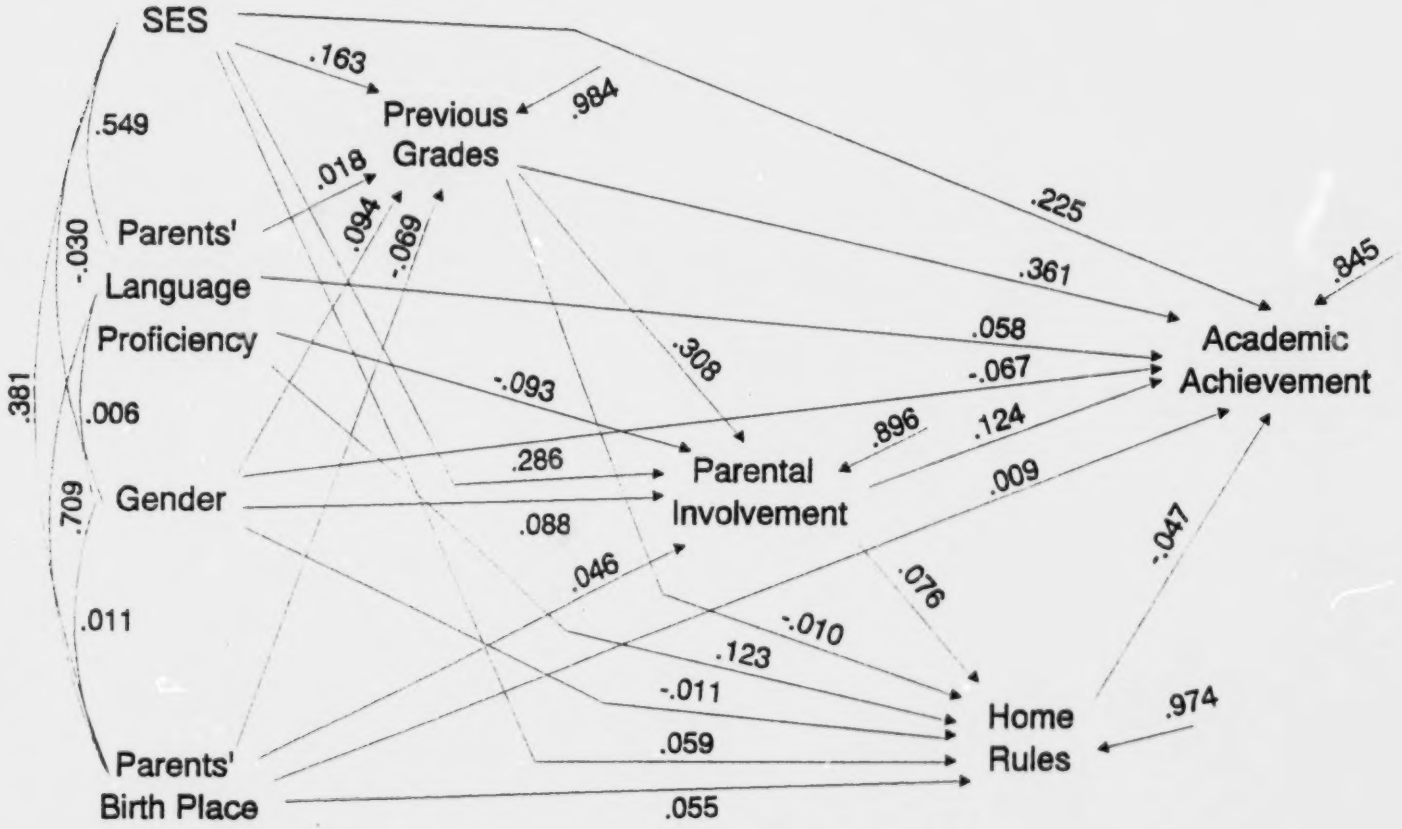
Reynolds, A. J. & Walberg, H. J., (1990, February). A structural model of educational productivity, Paper presented at the Advisory Council on Educational Statistics, Department of Education, OERI, Washington, DC.

U. S. Department of Education. (1987). What works: Research about teaching and learning, second edition. Washington. DC: Author.

Wolfle, L. M. & Ethington, C. A. (1986). Race and gender differences in a causal model of mathematics achievement. In T. Z. Keith (Chair). Methods and findings from longitudinal studies: The HSB harvest roles in. Symposium presented at the annual meeting of the American Educational Research Association, San Francisco.



A model of the Effects of SES, Parents' Language Proficiency, Gender, Parents' Birth Place, Previous Grades, Parental Involvement, and Home Rules on Achievement.



Effects of Parental Involvement on Eighth Grade Mexican-American Children's Academic Achievement.